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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/767,512	01/29/2004	Adiel M. Yoaz	50277-2935	5970

42425 7590 04/02/2008
HICKMAN PALERMO TRUONG & BECKER/ORACLE
2055 GATEWAY PLACE
SUITE 550
SAN JOSE, CA 95110-1083

EXAMINER

TRUONG, CAM Y T

ART UNIT	PAPER NUMBER
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2162

MAIL DATE	DELIVERY MODE
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04/02/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/767,512	Applicant(s) YOA ET AL.	
	Examiner Cam Y T. Truong	Art Unit 2162	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11/1/2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 4, 5, 9, 16, 22, 25-28 and 30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 4, 5, 9, 16, 22, 25-28 and 30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Applicant's election without traverse of Claims 1, 4-5, 9, 16, 22, 25-28, and 30 of Group I for examination and cancel all other claims in Group II in the reply filed on 11/1/2007 is acknowledged.

Claims 1, 4-5, 9, 16, 22, 25-28, and 30 are pending in this Office Action.

Response to Arguments

2. Applicant's arguments with respect to claims 1, 4-5, 9, 16, 22, 25-28, and 30 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 1, 4-5, 9, 16, 22, 25-28, and 30 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The claim limitation "wherein the registered organization and data type information is used to type-check first function" in claim 30 was not described in the

specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s).

The claimed limitation "storing the result data obtained from the source in a format that reflects said organization and data type information" in claims 1, 16 and 22 was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s).

The dependent claims 4-5, 9, 25-28, and 30 of claim 1, 16, 22 are rejected under the same reason as discussed in claims 1, 16 and 22.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1, 4-5, 16, 22, 25-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Crisan et al (or hereinafter "Crisan") (US 20030191769) in view of Chang et al (or hereinafter "Change") (US 6584459).

As to claim 1, Crisan teaches the claimed limitations:

"receiving a request to execute a first function to return data from a source" as (paragraphs 0058, 0061, 0063),

"wherein the first function is able to return data with different organization" as (paragraphs 0060, 0091),

"in response to receiving said first request, performing the steps of executing a second function to obtain, from said source, organization and data type information describing data to be returned from said source by the first function" as (paragraphs 0063-0067);

"executing said first function against said source to obtain result" as (paragraphs 0091, 0058);

"registering the organization and data type information describing the data to be returned from said source" as (paragraph 0120);

"storing the result data obtained from the source" as (paragraphs 0058, 0120);

"returning the result data" as (paragraph 0120).

Crisan does not explicitly teach the claimed limitation "data types from more than one sources; in a format that reflects said organization and data type information".

Chang teaches functions return data types (col. 10, lines 10-50). UDFs convert XML files into a storage format with predefined attribute value, storing XML document internally with the DB2 database (col. 7, lines 54-67).

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Chang's teaching of functions return data types and UDFs convert XML files into a storage format with predefined attribute value, storing XML document internally with the DB2 database to Crisan's system in order to provide good management solutions for handling any type of data and further searching and retrieving many different data types of documents in a system quickly.

As to claims 4 and 26, Crisan and Chang teaches the claimed limitation subject matter as discussed in claim 1, Chang further teaches the claimed limitation "wherein determining that said source is associated with said request comprise determining whether a certain keyword is specified as a data return type of the first function" as (col. 11, lines 35-60).

As to claims 5 and 27, Crisan and Chang teaches the claimed limitation subject matter as discussed in claim 1, Chang further teaches the claimed limitation "wherein determining that said source is associated with said request comprises determining whether the first function returns data in an array of data elements" as (col. 12, lines 35-60; col. 10, lines 40-50).

As to claim 16, Crisan teaches the same claimed limitation as discussed in claim 16, Crisan further teach the claimed limitations "a processing entity; a memory coupled to the processing entity and having program code stored therein receive a request to execute a first function included in the program code to return data from data source" as (paragraphs 00155, 0098).

Claim 22 is rejected under the same reason as discussed in claim 1.

7. Claims 9 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Crisan et al (or hereinafter "Crisan") (US 20030191769) in view of Chang et al (or hereinafter "Change") (US 6584459) and further in view of Srinivasan.

As to claims 9 and 28, Crisan does not explicitly teach the claimed limitation "wherein the organization and data type information indicates an arrangement of rows and columns of a database table and wherein organizing the result data according to the organization and data type information comprise tabulating the result data according to the arrangement of rows and columns".

Srinivasan teaches the schema mapping module 108, when is executed, shows a representation of an object-oriented database schema 304 and a representation of a relational database schema 306. A chema mapping between the object-oriented database schema 204 and the relational database schema 306 is indicated by arrows 308. The schema mapping module 108 maps the relational database schema of RDBMS into the object-oriented schema associated with the object-oriented DBMS (fig. 3, col. 5, lines 5-15).

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Srinivasan's teaching of the schema mapping module 108, when is executed, shows a representation of an object-oriented database schema 304 and a representation of a relational database schema 306. A chema mapping between the object-oriented database schema 204 and the relational database schema 306 is indicated by arrows 308. The schema mapping module 108 maps the relational database schema of RDBMS into the object-oriented schema associated with the

object-oriented DBMS to The admitted prior art of the application in order to provide an efficient method for translating tuples retrieved from a relational database to object-oriented objects.

8. Claims 25 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Crisan et al (or hereinafter "Crisan") (US 20030191769) in view of Chang et al (or hereinafter "Change") (US 6584459) and further in view of the admitted prior art of the application.

As to claims 25 and 30, Crisan does not explicitly teach the claimed limitation "wherein the registered organization and data type information is used to type-check first function".

The admitted prior art of application teaches the DBMS processes the query including type-checking the query using the return type declared for the table function (fig. 2).

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply the admitted prior art of application teaches the DBMS processes the query including type-checking the query using the return type declared for the table function to Crisan's system in order to ensure that the data returned by the table function will be in a pre-defined format that can be returned to the user, avoiding type inconsistencies and errors in data processing system.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.


Anderson et al (US 6047291).

Contact Information

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cam Y T. Truong whose telephone number is (571) 272-4042. The examiner can normally be reached on Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Breene can be reached on (571) 272-4107. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Cam Y Truong
Primary Examiner
Art Unit 2162